

## Hong Van Thi Dang

E-Mail Address: Van.T.Dang@jpl.nasa.gov

Phone: (818) 393-0869

### Education

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- Sept 01– Dec 02      **Claremont Graduate University, Claremont,CA**  
Masters of Science in Applied Mathematics.
- Sept 97 – May 01      **Scripps College, Claremont,CA**  
Bachelor of Arts in Mathematics  
Thesis: *Traffic, A Modeling of Factors that Affect it*  
Received general scholarships from Union Pacific Corp., Ahmanson Co., and math department scholarship from The Willits Foundation

### Experience

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- Currently              **Technical Researcher** on **AIRS** validating and testing the cloud products.
- Mar 06 – 09              -**Staff Engineer** within the IS&CS group. Worked for the **NEWS** (NASA Energy and Water Cycle Study) project creating a merged data set consisting of data from ATRAIN satellite instruments for study of the hydrologic cycle. Analyzed the merged data from AIRS and MODIS cloud properties to see how/when they can best be compared and what the current problems are.
- Dec 03–Mar 06              -**Associate Engineer** for the Avionics Research and Technology Development Group at the Jet Propulsion Laboratory . Solved the Mission scheduling problem through unique application of stochastic modeling techniques. Results presented at the IEEE conference. Aided in development of low thrust trajectory models that optimized propellant utilization, fuel consumption, and flight time that was able to improve on current techniques by 20%. Was awarded Certificate of Recognition by NASA for patent on an Automatic Technique to Synthesize Avionics System Architecture.  
-**Associate Engineer** for the Sequencing and Planning Group. Worked as a Tactical Activity Planner/Sequence Integration Engineer and also as an Attitude Control Subsystem specialist for **MER**. Worked also on **Orbital Express** in planning the activities for the arm.
- May 02 – April 03              **Software Development Engineer/Math Analyst** for Beckman Coulter Inc. Employed in Math/Stats Group developing mathematical algorithms, models, and solutions to solve problems related to manufacturing of calibrators, reagents and improperly functioning biomedical instruments. Used statistical knowledge of Discriminant Analysis to predict DNA nucleotides and prostate cancer in patients. Extensive use of Matlab and Excel to develop software for Chemist in developing new chemistries and optimizing throughput of biomedical instruments.

### Publications

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Nasiri, S. L., **H. V. T. Dang**, B. H. Kahn, E. J. Fetzer, E. M. Manning, M. M. Schreier, and R. A. Frey (2011), Comparing MODIS and AIRS infrared-based cloud retrievals, *J. Appl. Meteor. Clim.*, doi: 10.1175/2010JAMC2603.1 (in press)

Hook Hua, Eric Fetzer, Amy Braverman, Seungwon Lee, Matthew Henderson, **Van T. Dang**, Manuel de la Torre Juarez, and Steven Lewis , Web Services for Custom Level 2 Data Subsetting and Level 3 Data Summarization of Merged A-Train Data, IEEE Aerospace Conference, Big Sky, Montana, March 7-14, 2009

M. de la Torre Juarez, Hook Hua, Eric J. Fetzer, **Van T. Dang**, Matthew Henderson, Seungwon Lee, Steven Lewis, Evan Fishbein, ACCESS-NEWS: A data processing web-service combining A-train instrument observations for studying the hydrological cycle, NASA Energy and Water Cycle Study (NEWS) team meeting, Baltimore, Maryland, November 3-5, 2008

Fetzer, E. J., W. Read, D. Waliser, B. Kahn, B. Tian, H. Vomel, F. Irion, H. Su, A. Eldering, M. de la Torre Juarez, J. Jian, **V. Dang**, Comparison of upper tropospheric water vapor observations from the Microwave Limb Sounder and Atmospheric Infrared Sounder, *J. Geophys. Res.*, 113, 2008

Savio Chau, **Van T. Dang**, Joseph Xu, James Lu, An Automatic Technique to Synthesize Avionics Architecture, ahs, pp.313-316, First NASA/ESA Conference on Adaptive Hardware and Systems (AHS'06), 2006

Richard J. Terrile, Christoph Adami, Hrand Aghzarian, Savio N. Chau, **Van T. Dang**, Michael I. Ferguson, Wolfgang Fink, Terrance I. Huntsberger, Gerhard Klimeck, Mark A. Kordon, Seungwon Lee, Paul von Allmen, and Joseph Xu, Evolutionary Computing Technologies for Space Systems, IEEE Aerospace Conference Proceedings, Big Sky, Montana, March 2005.

## **Awards**

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Nasa Team Honors Award, MER, 2008

Spot Award, Support of MER Flight Software, 2006